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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUN 2 = 1995

OFFICE OF PREVENTION, PESTICIDES, AND TOXIC SUBSTANCES

MEMORANDUM

Subject: MITC Ecological Effects Information

From:

Dennis McLane

Ecological Effects Branch

Environmental Fate and Effects Division (7507C)

To:

Kathy Monk, SACS

Because MITC is used as a soil fumigant, a wood preservative and is highly volatile only minimum data were required. The data required in the phase IV review for reregistration were:

72-1(a) Acute Fish/Bluegill

72-1(c) Acute Fish/Rainbow Trout

72-2(b) Acute Aquatic Invertebrates

122-1(a) Seed Germination/Seedling Emergence

122-1(b) Vegetative Vigor-

122-2 Aquatic Plant Growth

Degussa Corporation was concerned about the required plant studies for their wood treatment product. They requested a waiver for those studies. EEB agreed because they indicated that the use of the product as described on the Degussa label precludes contact with soil or potential effluent into surface waters. However, the data are still required for other uses.

In addition to the required studies EEB received three avian studies: one oral LD_{50} and two LC_{50} . None of these studies were considered valid nor were they reparable. However, because of the chemical's very volatile nature those studies were not considered to be feasible nor are they required.

Of the required studies, the three aquatic studies have been submitted and all fulfill the guideline requirements. The bluegill sunfish, rainbow trout, and Daphnia magna LC₅₀s were 142, 94, and 55 ppb, respectively. Based on the toxicity categories reported in Brooks (et al.1973) the rainbow trout and the Daphnia are in the "very highly toxic" category and the bluegill is in the "highly toxic" category.

If any further information is needed please call Dennis McLane 305-5096

Toxic Categories (Brooks et al. 1973)

ppb

<100 very highly toxic
100-1000 highly toxic
1000-10000 moderately toxic
10000-100000 slightly toxic
100000> practically nontoxic